Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 22 of the Commission's Rules	)	WT Docket No. 03-103
To Benefit the Consumers of Air-Ground	)	
Telecommunications Services	)	
	)	
Biennial Regulatory Review—Amendment of	)	
Parts 1, 22, and 90 of the Commission's Rules	)	

NOTICE OF PROPOSED RULE MAKING

Adopted: April 17, 2003 **Released: April 28, 2003**

By the Commission:

Comment Date: [60 days after Federal Register Publication]
Reply Comment Date: [90 days after Federal Register Publication]

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I. INTRODUCTION

1. In this Notice of Proposed Rulemaking (Notice), we undertake a reexamination of our rules governing the provision of air-ground telecommunications services on commercial airplanes in order to enhance the options available to the public. We also propose, partly in fulfillment of our biennial review responsibilities, to revise or eliminate certain Part 22 Public Mobile Services (PMS) rules that have become obsolete as the result of technological change, increased competition in the Commercial Mobile Radio Services (CMRS), supervening changes to related Commission rules, or a combination of these factors.[1] This Notice in addition proposes to recodify certain Part 22 PMS rules to Part 1 of our rules,[2] amend several of our Part 1 rules, and make several conforming amendments to our Part 90 rules.[3] We also seek comment on providing licensees of nationwide paging channels flexibility to

[1] 47 C.F.R. Pt. 22. Part 22 contains 10 subparts. The first three subparts—Subparts A (Scope and Authority), B (Licensing Requirements and Procedures) and C (Operational and Technical Requirements)—apply generally to all Part 22 licenses. The fourth subpart, Subpart D, contains rules for developmental authorizations. Each of the next five Subparts (E through I) contain rules applicable to one of the five Part 22 services: (1) Paging and Radiotelephone; (2) Cellular Radiotelephone; (3) Rural Radiotelephone; (4) Air-Ground Radiotelephone; and (5) Offshore Radiotelephone. Finally, Subpart J implements the Communications Assistance for Law Enforcement Act (CALEA) as it applies to Part 22 services. *See* Pub. L. No. 103-414, 108 Stat. 4279 (1994) (codified as amended in scattered sections of 18 U.S.C. and 47 U.S.C. §§ 229, 1001-1010, 1021).

[2] *See* 47 C.F.R. Pt. 1 (Practice and Procedure).

[3] *See* 47 C.F.R. Pt. 90 (Private Land Mobile Radio Services).

provide other services and on whether our rules limiting the provision of dispatch service by paging licensees are too restrictive. Adoption of this Notice is one step in achieving one of our key strategic goals—to "[e]ncourage the highest and best use of spectrum domestically and internationally in order to encourage the growth and rapid deployment of innovative and efficient communications technologies and services."[4]

2. We initiate this proceeding partly in furtherance of our biennial review of regulations pursuant to Section 11 of the Communications Act of 1934, as amended.[5] Section 11 requires us to review our regulations applicable to providers of telecommunications service and to "determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service," and to repeal or modify any regulation that we find no longer necessary in the public interest.[6] This Notice, in part, is one of the steps in our implementation of staff recommendations[7] under Section 11 for deleting or modifying various Part 22 rules. In addition, the Notice considers other proposals submitted to the Commission by members of the public regarding changes to the Part 22 regulations, including those that do not fall within the scope of Section 11. We accordingly seek comment below on changes to rules for each of the Part 22 services other than cellular as well as our rules governing developmental authorizations.[8] In addition to eliminating unnecessary regulatory hurdles, many of these proposals provide licensees with greater flexibility regarding the use of their spectrum, which in turn leads to greater technical, economic, and marketplace efficiency.[9]

3. Most importantly, we are here initiating a reexamination of our rules that affect the provision of commercial air-ground service to consumers. It appears to us that existing rules and regulations regarding the use of the commercial air-ground spectrum[10]—as well as rules governing the

[4] Federal Communications Commission, Strategic Plan FY 2003-FY 2008 at 5 (2002)

[5] 47 U.S.C. § 161.

[6] 47 U.S.C. § 161(a)(2)&(b). In our *Cellular Year 2000 Biennial Report and Order,* we stated that "section 11 places the burden on the Commission to make the requisite determinations; no particular burden is placed on the opponents or proponents of a given rule." Year 2000 Biennial Regulatory Review–Amendment of Part 22 of the Commission's Rules to Modify or Eliminate Outdated Rules Affecting the Cellular Radiotelephone Service and Other Commercial Mobile Radio Services, *Report and Order*, FCC 02-229, at ¶4 (rel. Sept. 24, 2002) (*Cellular Year 2000 Biennial Report and Order*), citing In the Matter of 2000 Biennial Regulatory Review Spectrum Aggregation Limits for Commercial Mobile Radio Services, WT Dkt. No. 01-14, *Report and Order*, 16 FCC Rcd 22628, 22679 ¶25 (2001); *see also Second Report and Order*, FCC 02-247 (rel. Sept. 24, 2002); *Erratum*, DA 02-2969 (rel. Nov. 4, 2002).

[7] *See* Biennial Regulatory Review, CC Docket No. 00-175, *Report*, FCC 00-456 (adopted Dec. 29, 2000; rel. Jan. 17, 2001) (*2000 Biennial Review Report*); Biennial Regulatory Review 2000 Updated Staff Report (rel. Jan. 17, 2001) (Staff Report); 2002 Biennial Regulatory Review, *Report*, FCC 02-342, 2003 WESTLAW (FEDCOM FCC) 1192543 (adopted Dec. 31, 2002; rel. March 14, 2003); The Commission Seeks Public Comment in the 2002 Biennial Review of Telecommunications Regulations Within the Purview of the Wireless Telecommunications Bureau, *Public Notice*, FCC 02-264 (rel. Sept. 26, 2002).

[8] We are not here addressing the specific rules contained in Subpart J regarding the implementation of CALEA for Part 22 services. We are addressing implementation of CALEA in CC Docket No. 97-213. *See* In The Matter of Communications Assistance for Law Enforcement Act, *Order on Remand*, 2002 WESTLAW (FEDCOM FCC) 534605.

[9] *See* FCC Staff Report, *Spectrum Policy Task Force Report,* ET Dkt. No. 02-135 (rel. Nov. 2002).

[10] *See* 47 C.F.R. §§ 22.857-22.875.

use of other wireless services for such transmissions—may be impeding the efficient, competitive provision of services to the public. We thus request parties to assess our current rules and policies affecting air-ground services—both with respect to the commercial air-ground spectrum itself and in other wireless services—and identify restrictions or policies that impede the competitive provision of services designed to meet consumers' needs, as well as make suggestions for rules and policies that would achieve more effective consumer choice and efficient spectrum use. This reexamination is intended to be expansive, and we welcome the ideas of all interested parties, specifically including airlines and airline passengers.[11]

4. At the conclusion of this rulemaking, we anticipate that the non-cellular Part 22 rules will be substantially abbreviated with the elimination of as many as 40 rules. While such rules may have had a role to play when adopted, many today serve merely as reminders of outmoded policies and technical concerns or unnecessarily limit the flexibility of Part 22 licensees to respond to the marketplace and meet the needs of consumers. These potential limitations on responding to public needs for service may be particularly true for the rules and policies affecting air-ground telecommunications services. Elimination or revision of many of the Part 22 and related rules to align them with the current technical and operational environment, and to allow for future technological innovation, will thus serve the public interest.

II. DISCUSSION

A. Overview

5. We first address the opportunities for modifying our rules affecting commercial air-ground services and for promoting innovative offerings in dedicated commercial air-ground, as well as other, spectrum to meet the needs of consumers traveling on commercial aircraft for readily available wireless telecommunications services. Following that discussion, additional proposals to modify or eliminate certain Part 22 rules in this Notice are organized by the order in which the particular rule sections appear in Part 22. Many of the proposals below seek to eliminate rules that appear to have become obsolete as a result of meaningful economic competition among providers of wireless services or technological developments. In addition, some of the proposals in this Notice are intended to harmonize the regulatory scheme applicable to wireless service providers under Part 22 as well as other provisions of our rules. For example, we propose to consolidate into Part 1 both the method for calculating distance and the method for calculating terrain elevation applicable to wireless service providers.[12] We also seek comment regarding how any of our Part 22 rules governing developmental authorizations can be improved and whether certain of these rules should be eliminated.[13]

6. We propose to ease regulatory requirements wherever appropriate. For example, we propose to eliminate the requirement to file FCC Form 409 (Airborne Mobile Radio Telephone License Application) to apply for authority to operate a general aviation airborne station.[14] We also propose to amend section 1.929(c)(1) to specify that certain expansions over water of a composite interference

[11] We note, however, that use of cellular telephones and other wireless devices on commercial aircraft will continue to be regulated by the Federal Aviation Administration (FAA), regardless of the action we take in this proceeding.

[12] *See* paras. 32-34, *infra*.

[13] *See* paras. 46-50, *infra*.

[14] *See* paras. 25-27, *infra*.

contour (CIC) of a site-based licensee in the Paging and Radiotelephone Service, as well as in the Rural Radiotelephone and 800 MHz Specialized Mobile Radio Services, on a secondary, non-interference basis are not a major modification of license.[15] We also seek comment on whether licensees of frequencies designated for nationwide network paging service should be permitted to use these channels to provide service other than nationwide network paging,[16] and whether the limitations placed on the provision of dispatch service by paging and radiotelephone service licensees should be revised or eliminated.[17]

B. Reexamination of Rules Relating to Commercial Air-Ground Service

7. We are initiating in this proceeding a reexamination of our rules that may affect the provision of commercial air-ground service, *i.e.*, those rules affecting the availability of wireless services to passengers on commercial aviation aircraft. Pursuant to section 22.925 of our rules and Federal Aviation Administration ("FAA") rules as supplemented by an advisory circular,[18] passengers generally have been unable to use their terrestrial wireless handsets while in flight. Instead, passengers often have had access to a specialized air-ground service provided by the airline. Although the Commission allocated spectrum in the 800 MHz band for this commercial air-ground service and initially licensed six competing licensees, only one such licensee is still providing this service.[19] This situation causes us to question whether the existing rules are inhibiting the viability of commercial air-ground operations on dedicated spectrum. At the same time, we have seen increased interest from a number of airlines in the possible liberalization of the Commission's rules in this area. Accordingly, the time is ripe for a fundamental reexamination of the Commission's rules.

1. Background

8. *Commercial Air-Ground Radiotelephone Service*. The Commission expressly provided for a commercial air-ground service by allocating four MHz of spectrum for commercial air-ground radiotelephone service in 1990,[20] authorizing operation at 849-851 MHz (ground stations) and 894-896 MHz (airborne mobile stations). This spectrum is divided into ten channel blocks, each of which is further subdivided into six control channels (P1-P6) and 29 communications channels (C1-C29).[21]

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[15] *See* paras. 51-55, *infra.*

[16] *See* para. 56, *infra.*

[17] *See* para. 62, *infra.*

[18] 47 C.F.R. § 22.925; 14 C.F.R. § 91.21; Federal Aviation Administration Advisory Circular No. 91.21-1A, "Use of Portable Electronic Devices Aboard Aircraft" (Oct. 2, 2000).

[19] Of the six originally licensed entities, only three constructed and operated systems; now, only one remains in operation.

[20] *See* Amendment of the Commission's Rules Relative to Allocation of the 849-851/894-896 MHz Bands, *Report and Order*, 5 FCC Rcd 3861 (1990).

[21] In 2001, at the request of the only two licensees then active, the Commercial Wireless Division of the Wireless Telecommunications Bureau granted a waiver of section 22.857, which provides each air-ground radiotelephone licensee with an exclusive control channel. Pursuant to this decision, two unassigned control channels (P-5 and P-6) may be used as an additional communications channel (C-30) and the guardband between control channel P-4 and communications channel C-30 has been increased from 3.2 kHz to 3.6 kHz. See Claircom Licensee Corporation and GTE Airfone Incorporated Requests for Waivers of Air-ground Radiotelephone Service Rules, *Order*, 16 FCC Rcd 17959 (WTB, CWD, rel. Oct. 9, 2001) ("Claircom/Airfone Waiver Order"). The Waiver Order provides for modification of the waiver grant in the event the Commission were to decide to assign (continued....)

Licensees in this service generally must locate their ground stations within 1.6 kilometers of the 97 site locations identified by coordinates in section 22.859 of our rules.[22] One of the ten blocks of channels is allotted to each of these geographic site locations. Each of the six possible commercial air-ground licensees has access to an exclusive nationwide control channel in each channel block; communications channels are shared among all licensees. Each of the six licensees must provide nationwide service.

9. The operations of commercial air-ground licensees are subject to certain practical limitations in light of the existing regulatory regime. To promote interoperable communications and to manage interference, some of the ground station locations in North America have been predetermined consistent with bilateral agreements with Mexico and with Canada. The number of communications channels limits the number of voice calls that can be simultaneously handled in a particular area. The specified narrow bandwidth (6 kHz) of the communications channels limits a service provider's ability to provide services other than voice and low-speed data services.[23]

10. *Limitations on Use of Wireless Devices on Commercial Aircraft.* Limitations on the use of wireless devices on commercial airborne aircraft derive from two sources, with separate justifications. Initially, the FAA adopted the predecessor to its current rule in 1961, to prohibit the operation of portable frequency-modulated radio receivers aboard U.S. aircraft when the very high frequency omnidirectional range was being used for navigation purposes.[24] The FAA subsequently added other "personal electronic devices" (which includes wireless phones) to this prohibition. Specifically, the FAA generally prohibits the use of personal electronic devices on airplanes unless "the operator of the aircraft has determined [the portable electronic device] will not cause interference with the navigation or communication system of the aircraft on which it is to be used."[25] The FAA has recently explained that it

(Continued from previous page)
this spectrum to another air-ground radiotelephone licensee or to use it for another purpose. Claircom/Airfone Waiver Order at ¶7.

[22] 47 C.F.R. § 22.859. The purpose of using the specified site locations and frequency blocks is to minimize interference due to Doppler frequency shift. Because the air-ground channels are narrow (6 kHz), the relative motion of the aircraft and the ground station cause the frequency received to be shifted from its transmitted value. Because the channels are all used and adjacent to one another, they must all shift together by the same amount, or the signals will overlap and result in unacceptable interference.

In certain instances, the rules permit stations at locations that are more than 1.6 kilometers from the specified locations. For example, pursuant to section 22.859(b), a ground station may be located at a distance greater than 1.6 kilometers from all of the locations listed in the geographical channel block layout, provided that it also is located at a minimum distance of 855 kilometers (550 miles) from all antenna locations of ground stations using the same channel block. Pursuant to section 22.859(a), commercial air-ground licensees may construct and operate low power ground stations at additional locations on a non-interfering basis. 47 C.F.R. § 22.859(a).

[23] When the Commission adopted the rules for this service, it implemented policies and technical constraints consistent with the experimental air-ground system licensed to Airfone, Inc. (now Verizon Airfone) six years prior to the order establishing the service in Part 22. In the Matter of Amendment of the Commission's Rules Relative to Allocation of the 849-851/894-896 MHz Bands, FCC 90-140, *Report and Order* (rel. June 15, 1990). The Commission sought to promote open entry, which required that the licensees be technically compatible and coordinate with one another.

[24] Federal Aviation Administration Advisory Circular No. 91.21-1A, "Use of Portable Electronic Devices Aboard Aircraft," at 1 (Oct. 2, 2000) (FAA PED Advisory Circular).

[25] 14 C.F.R. § 91.21. *See also* 14 C.F.R. §§ 121.306, 125.204, 135.144. These rules exempt portable voice recorders, hearing aids, heart pacemakers, and electric shavers from the prohibition.

adopted these restrictions because of "the potential for portable electronic devices (PED) to interfere with aircraft communications and navigation equipment."[26]

11. Separately, the Commission adopted section 22.925 of its rules in 1991 to prohibit airborne use of cellular telephones.[27] The Commission imposed this limitation in order to guard against harmful interference to terrestrial cellular operations.[28] There is no comparable rule governing use of PCS phones on airborne aircraft.[29] However, the Commission has recognized that, even in the absence of specific FCC regulations governing airborne use, "the FAA has joint jurisdiction with the FCC regarding the use of telecommunications devices on airplanes."[30] Indeed, the Commission has pointed out that its rules "with regard to the use of cellular telephones on board aircraft are subject to FAA guidelines. Therefore, neither cellular carriers nor their subscribers can demand to use cellular service aboard aircraft if the FAA has proscribed such use, and any use is specifically subject to all FAA regulations."[31] The FAA has requested that RTCA, Inc., an industry consensus organization under the Federal Advisory Committee Act,[32] form an advisory committee of government, industry and academic experts to specifically address the risks associated with use of portable wireless devices on aircraft. This RTCA advisory committee is expected to complete its task in late 2005. FAA regulations and guidance related to the use of portable electronic devices on board aircraft are not expected to change significantly until this advisory committee completes its studies and provides recommendations back to the FAA.

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[26] FAA PED Advisory Circular at 1.

[27] 47 C.F.R. § 22.925. This section provides: "Cellular telephones installed in or carried aboard airplanes, balloons or any other type of aircraft must not be operated while such aircraft are airborne (not touching the ground). When any aircraft leaves the ground, all cellular telephones on board that aircraft must be turned off. The following notice must be posted on or near each cellular telephone installed in any aircraft: 'The use of cellular telephones while this aircraft is airborne is prohibited by FCC rules, and the violation of this rule could result in suspension of service and/or a fine. The use of cellular telephones while this aircraft is on the ground is subject to FAA regulations.'" This rule was adopted in Amendment of Sections of Part 22 of the Commission's Rules in the Matter of Airborne Use of Cellular Telephones and the Use of Cell Enhancers in the Domestic Public Cellular Radio Service, *Report and Order*, 7 FCC Rcd 23 (1991) (Airborne Use of Cellular Telephones). The prohibition originally was adopted as section 22.911 but was subsequently renumbered section 22.925.

[28] Airborne Use of Cellular Telephones, 7 FCC Rcd at 23-24.

[29] Part 90 land mobile operations, which include Specialized Mobile Radio, are permitted aboard aircraft so long as: (1) the aircraft is regularly flown at altitudes of less than 1.6 km above the earth's surface; (2) the transmitter output power does not exceed ten watts; (3) the operations are secondary to land-based systems; and (4) any other steps necessary to minimize interference to land-based systems are implemented. 47 C.F.R. § 90.423(a).

[30] Airborne Use of Cellular Telephones, 7 FCC Rcd at 24. The Commission specifically noted: "Because the FAA has raised concerns that cellular telephones may, under certain circumstances, cause interference with aircraft systems and there is a need for further testing in this area to assess this potential risk, we will defer to the FAA on aircraft operations to establish regulations for use of cellular telephones on aircraft on the ground. The FAA is addressing this issue by developing operational guidelines to restrict cellular telephones to use at the gate and during extended waits on the ground when authorized by the captain. We applaud these efforts to establish reasonable guidelines to protect airline safety while permitting some uses of cellular telephones on aircraft while on the ground." *Id.*

[31] *Id.*

[32] 5 U.S.C., Appendix 2. In addition, the FAA charters RTCA, Inc., as a Federal Advisory Committee under FAA Order 1110.77, as amended.

Therefore, regardless of changes to Part 22 of our rules,[33] FAA regulations will continue to regulate the use of all portable wireless devices, including cellular telephones, on board aircraft.

12. *Recent Developments*. Current market and technical developments strongly suggest there may be significant consumer benefits from changing our existing regulatory framework. At present, there is only one commercial air-ground radiotelephone licensee with an active license—Verizon Airfone—and, according to reports, it intends to continue to provide commercial air-ground service.[34] Another commercial air-ground licensee—AT&T Wireless—discontinued operations on September 1, 2002,[35] and recently cancelled its license.[36] Four other nationwide licenses have been unassigned for some time, but no one has formally requested that the Commission open another application filing window.[37]

13. The price of the wireless service available to commercial airline passengers has traditionally been high when compared to terrestrial wireless service pricing. For instance, consistent with the customary pricing for air-ground service, Verizon Airfone today generally charges a connection fee of $3.99 for each voice call, plus $3.99 per minute of air time.[38] A recent *USA Today* article notes that average calls per flight on the commercial air-ground spectrum have fallen from four to one and one-half,[39] and both that story and a recent *Wall Street Journal* article attribute limited usage of the commercial air-ground service to the high price.[40]

14. Some parties are working to expand and improve the services available to airline passengers. Verizon Airfone has taken a number of steps to enhance its services, with voice, data, and fax communications capability now found on all its phones.[41] The company also launched an in-flight data service called JetConnect(SM) in September 2002 on some commercial U.S. flights, including

[33] 47 C.F.R. Part 22.

[34] *See, e.g.*, Paul Davidson, "In-flight Cellphone Use Might Become a Reality," *USA Today* (Oct. 23, 2002) at A1; Ron Liefer and J. Lynn Lumsford, "Totally Wired at 32,000 Feet," *Wall Street Journal* (Oct. 24, 2002) at D1; Welcome to Airfone web site, www22.verizon.com/airfone and www.22.verizon.com/airfone/service/af_service.htm.

[35] *See* Paul Davidson, "In-flight Cellphone Use Might Become a Reality," *USA Today* (Oct. 23, 2002) at A1.

[36] *See* Claircom Licensee Corporation Application for Cancellation of License, Call Sign KNKG801, File No. 0001161399 (filed Jan. 16, 2003).

[37] Pursuant to section 22.875 of our rules, applications for authorization in this service may only be filed during window filing periods announced in public notices. 47 C.F.R. § 22.875.

[38] *See* Paul Davidson, "In-flight Cellphone Use Might Become a Reality," *USA Today* (Oct. 23, 2002) at A1; www22.verizon.com/airfone/service/af_service_genrates.htm.

[39] Paul Davidson, "In-flight Cellphone Use Might Become a Reality," *USA Today* (Oct. 23, 2002) at A1.

[40] *See id.*; Ron Liefer and J. Lynn Lumsford, "Totally Wired at 32,000 Feet," *Wall Street Journal* (Oct. 24, 2002) at D1.

[41] *See* Welcome to Airfone web site, http://www22.verizon.com/airfone and www.22.verizon.com/airfone/service/af_service.htm.

planes operated by Continental Airlines, Inc.[42] One report indicates that Verizon Airfone hoped to have the JetConnect service available on over 100 airplanes by the end of 2002.[43] The service includes instant messaging, online games, and current news, priced at $5.99 for an entire flight.[44] Verizon Airfone also has indicated that, in order to meet the needs of consumers on commercial aircraft, it "plans solutions that would use other frequencies, such as the 2.4 GHz band used by the unlicensed Bluetooth and 802.11b technologies that are already available in many portable devices and are expected to be integrated into some cellular handsets soon."[45] A Verizon Airfone representative explained that "[p]assengers would use their personal cell phones to connect to the onboard phone system through a Bluetooth access point, so that the onboard phone system would be the bearer system to the ground."[46]

15. Another party significantly interested in providing commercial air-ground service to airline passengers is AirCell, Inc. Through its cellular licensee partners, AirCell provides, pursuant to waiver, air-ground services to general aviation aircraft using traditional cellular networks and frequencies.[47] The AirCell system connects to existing ground-based cellular networks pursuant to agreements with 24 cellular providers.[48] While, to date, AirCell has provided air-ground service only to general aviation aircraft over its network, it has announced plans to begin testing the service in commercial aircraft.[49]

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[42] *See* Ron Liefer and J. Lynn Lumsford, "Totally Wired at 32,000 Feet," *Wall Street Journal* (Oct. 24, 2002) at D1; Bob Woods, "IM'ing at 30,00 Feet," Instant Messaging Planet (Sept. 24, 2002), available at www.instantmessagingplanet.com/public/article/0,10817_1469141,00.htm.

[43] Bob Woods, "IM'ing at 30,00 Feet," Instant Messaging Planet (Sept. 24, 2002), available at www.instantmessagingplanet.com/public/article/0,10817_1469141,00.htm.

[44] *See* Ron Liefer and J. Lynn Lumsford, "Totally Wired at 32,000 Feet," *Wall Street Journal* (Oct. 24, 2002) at D1.

[45] Letter to Marlene H. Dortch, Secretary, Federal Communications Commission, from L. Andrew Tollin, Douglas I. Brandon, J.R. Carbonnell, and John T. Scott, III, at 2 (dated Sept. 23, 2002).

[46] "Inflight Cell-Phone Tests Challenged," *WAEA Industry News* (Sept. 16, 2002) at 3.

[47] AirCell and its partners have been granted waivers of the Commission's rule, 47 C.F.R. § 22.925, prohibiting the use of cellular phones on planes in order to implement an air-ground service. AirCell's system uses specially designed mobile units and ground equipment to allow users to access the existing networks of AirCell's cellular licensee partners without causing the harmful interference against which section 22.925 was designed to protect. *See* In the Matter of AirCell, Inc., Petition, Pursuant to Section 7 of the Act, For a Waiver of the Airborne Cellular Rule, Or, in the Alternative, for a Declaratory Ruling, *Order*, 14 FCC Rcd 806 (WTB 1998), reconsideration granted in part, denied in part, *Order on Reconsideration*, 14 FCC Rcd 19430 (WTB 1999), application for review denied, *Memorandum Opinion and Order*, 15 FCC Rcd 9622 (2000), affirmed in part and remanded in part, *AT&T Wireless Services, Inc., et al., v. FCC*, 270 F.3d 959, 968 (D.C. Cir. 2001), *Order on Remand*, FCC 02-324 (rel. Feb. 10, 2003), petition for review filed (D.C. Cir. Feb. 26, 2003).

[48] Press Release, "Frontier Airlines to Participate in Trial of AirCell, Inc.'s Cellular Airborne Telephones" (Sept. 25, 2002), located at www.Aircell.com/news/PressReleases/Frontier.htm.

[49] *See id.* AirCell has indicated that, to the extent any additional or modified waiver authority or experimental license is required in order to conduct the desired tests on commercial aircraft, it will obtain such necessary authorization. Nothing in AirCell's current waiver prohibits operation on commercial, as opposed to general aviation, aircraft.

16. Certain commercial airlines also have recently expressed significant interest in reforms that would allow improvement in service to their passengers. Delta Air Lines, for example, recently stated to the Commission that it believes that its "passengers also want to use their cell phones during flight if they would be permitted to do so. . . . If this technology can be applied to commercial passenger aircraft so that passengers can use their own cell phones, this would be a major benefit to our airline and passengers, including our many frequent travelers whose convenience and productivity would be increased by the availability of these communications."[50] A recent *Wall Street Journal* article indicates that a number of airlines are exploring a variety of technologies for enhancing communications (including surfing the Internet) by passengers during flight, from Verizon Airfone's updated air-ground service to satellite technology, such as Connexion by Boeing.[51] Frontier Airlines, Inc. and AirCell have announced plans for a trial of AirCell's airborne cellular telephone system on one of Frontier's aircraft.[52]

2. Discussion

17. Given the limitations on commercial air-ground operations described above, the current state of the marketplace for commercial air-ground spectrum, and the amount of spectrum involved, we are initiating this reexamination of our rules. We seek comment regarding whether the commercial air-ground spectrum is being efficiently used, since there is now only one operating licensee in a regulatory plan that originally contemplated six competing service providers. To this end, we are open to all possible suggestions for fundamental reform of our spectrum policy in this band. We seek comment on whether any changes to our rules could provide greater opportunities for the competitive provision of air-ground services, leading to lower prices to consumers and increased choices in wireless services and enhancements while traveling by commercial airliner. In addition, we seek comment regarding whether this spectrum should be limited to air-ground use, or whether we should allow for more flexible use.[53] Our goal is to promote the highest valued use of this spectrum, with service provision that better meets the needs of the public for wireless communications services. We also seek comment regarding possible changes to our rules that would encourage the use of innovative, spectrum-efficient technologies in this spectrum.

18. *Air-Ground Spectrum*. As noted above, there is limited competition in the commercial air-ground spectrum, despite Commission licensing of six operators in this band. We are concerned that there is only one licensee remaining in this service, which suggests that reforms may be needed to the original structure. To what extent does the lack of competition stem from our rigid structure for licensing service providers? Is this a situation where our detailed regulatory scheme adopted in 1991 is hindering achievement of public interest benefits that could be better attained through deregulatory steps that promote flexibility and technical innovation? In light of experience gained since the commercial air-ground service was established, rigid service rules adopted to promote six licensees and that significantly delimit the permissible spectrum usage seem at least suspect when significantly fewer than six service providers appear viable. To what extent are there economic or related factors limiting marketplace competition? For example, to what extent is the number of active air-ground service providers

[50] Letter to Michael K. Powell, Chairman, Federal Communications Commission, from Timothy W. Mapes, Managing Director, Customer Products and Services, Delta Air Lines, Inc. (dated Oct. 2, 2002).

[51] Ron Liefer and J. Lynn Lumsford, "Totally Wired at 32,000 Feet," *Wall Street Journal* (Oct. 24, 2002) at D1; Susan Stellin, "A Networked World's Final Frontier: the Airplane," *New York Times* (Nov. 12, 2002) at C9.

[52] Press Release, "Frontier Airlines to Participate in Trial of AirCell, Inc.'s Cellular Airborne Telephones" (Sept. 25, 2002), located at www.Aircell.com/news/PressReleases/Frontier.htm.

[53] *See* para 21, *infra* (discussing potential limitations on flexible use).

determined by the nature of the relationships these providers must have with the airlines in the provision of air-ground service (*e.g.*, the need for commercial air-ground licensees to establish a relationship with each airline in order to place its phones on planes, as well as the generally exclusive nature of agreements entered into by individual airlines and air-ground licensees)?

19. In evaluating the provision of commercial air-ground service, we also seek comment on whether there are other steps we should consider to reform our commercial air-ground spectrum rules to permit more efficient use of this spectrum. Is there more innovative, spectrum-efficient technology available that could be used in this spectrum? If so, how best can we promote deployment of such technology? Should we increase the operational flexibility afforded to air-ground licensees to determine how best to meet the wireless service needs of commercial passengers while airborne? If we do so, should we retain the current structure in the 800 MHz band providing for six commercial air-ground licenses, with flexible rights granted to the existing licensee, or should we introduce a new licensing scheme?

20. We also seek comment on whether the choices available to consumers would be enhanced by granting flexibility to provide both air-ground and terrestrial wireless services in this spectrum. Would increased flexibility of this type provide benefits to consumers of air-ground and other wireless services? Would this expanded flexibility raise any co-channel, adjacent channel, or other interference issues, *e.g.*, with respect to existing or future services in the 800 MHz band?[54] What other considerations should we take into account in assessing this possible option?

21. We note, for example, that allowing flexibility in the 849-851/894-896 MHz band to provide terrestrial as well as airborne services would require a change to the current domestic allocation for the band, which is for aeronautical mobile services. We also note that current bilateral agreements between the United States, Canada, and Mexico provide for coordinated use of air-ground frequencies over North American airspace, and therefore could limit the potential for more flexible use of this spectrum. Because we recognize that any change to the current allocation of this band to allow greater flexibility raises a host of legal, policy, and implementation issues, we request parties wishing us to consider these options to address such implications.

22. *Possible Use of Other Spectrum To Provide Commercial Air-Ground Service*. In light of the marketplace developments noted above, we also wish to consider alternative sources of air-ground service in addition to operators using the spectrum specifically allocated for such service. Should we change our rules for cellular spectrum, or any other CMRS spectrum, to permit licensees greater freedom to provide various air-ground services? Should we repeal or modify our prohibition against the use of cellular equipment while airborne?[55] There clearly are significant technological developments that may facilitate the use of such equipment on airborne aircraft without causing interference to terrestrial

[54] We note that the 849-851 MHz air-ground band is immediately adjacent to 800 MHz General Category land mobile channels at 851-854.75 MHz that are used by both public safety and commercial SMR systems and that are discussed in our pending proceeding on 800 MHz public safety interference issues. *See* Improving Public Safety Communications in the 800 MHz Band; Consolidating the 900 MHz Industrial/Land Transportation and Business Pool Channels, WT Docket No. 02-55, *Notice of Proposed Rule Making*, 17 FCC Rcd 4873 (2002), *Erratum*, 17 FCC Rcd 7169 (2002). Some proposals in that docket contemplate the possible relocation of public safety users to the 851-854 MHz band, adjacent to the 849-851 MHz air-ground band, raising additional questions about possible interference to be considered in evaluating any proposals regarding use of the Part 22 commercial air-ground frequencies. Thus, our consideration of possible flexibility in the 800 MHz air-to-ground spectrum may be affected by the outcome of that proceeding.

[55] *See* 47 C.F.R. § 22.925.

operations or posing aeronautical risks, as well as heightened interest from the airline industry in permitting such use. For example, an airplane passenger might be able to rely on his or her CMRS handset to send and receive data or voice communications, at low power, to a special transceiver located on the airplane itself. This transceiver then could communicate with terrestrial locations. Of course, even if the Commission were to repeal its airborne cellular prohibition, we note that FAA rules and advisories or the determinations of individual airlines may continue to define permissible use of wireless devices on airborne commercial airplanes due to concerns about possible interference to the aircraft's own systems. Nevertheless, we seek comment on whether allowing for greater flexibility in our own rules would be beneficial in encouraging the development of innovative airborne technologies that would be compatible with FAA rules and directives governing aircraft safety. We seek comment on whether we should consider any other changes to our rules to facilitate the provision of commercial air-ground service by licensees of other spectrum.

23. The subsequent sections address the various subparts of Part 22 in order, omitting, as previously noted, the rules concerning cellular service and implementation of CALEA.

C. Scope and Authority

24. *Authorization required.* Section 22.3(b) provides that, except for certain stations in the Rural Radiotelephone Service and the Air-Ground Radiotelephone Service, subscribers' operation of mobile or fixed stations in the Public Mobile Services is covered by "the authorization held by the common carrier providing service to them."[56] As discussed in paragraph 28 below, we are proposing to eliminate the restriction that license holders in Part 22 may only be current or future "common carriers." We therefore tentatively conclude that the term "common carrier" in this section can be replaced with the term "licensee," and that end users could continue to rely on the operating authority granted by the Commission to their service provider.

25. *Form 409, Airborne Mobile Radio Telephone License Application.* In contrast to most Part 22 services, section 22.3(b)(1) requires an individual authorization to operate a general aviation airborne mobile station—an end user unit—in the Air-Ground Radiotelephone Service.[57] This requirement is also reflected in section 1.903(c) of our rules.[58] Individuals must file FCC Form 409 (Airborne Mobile Radio Telephone License Application) to apply for authority to operate an airborne station,[59] and must file FCC Form 409 to modify or renew an existing license. For the reasons stated below, we tentatively conclude that this individual licensing requirement should be eliminated.

26. In 1980, the Commission abolished licensing of individual mobile units in most public land mobile services.[60] The Commission reasoned that individual land mobile units served by a base

[56] 47 C.F.R. § 22.3(b).

[57] 47 C.F.R. § 22.3(b)(1).

[58] 47 C.F.R. § 1.903(c).

[59] FCC Form 409 was adopted in 1976. *See* Amendment of Part 21, Domestic Public Radio Services (Other than Maritime Mobile) and Adoption of FCC Form 409, *Order*, 63 FCC 2d 228 (1976).

[60] Individual Licensing Procedures, *Report and Order*, 77 FCC 2d 84 (1980). In 1983, the Commission abolished individual licensing of subscriber units in the rural radio service for which the effective radiated power does not exceed 60 watts. *See* Public Mobile Radio Services, *Report and Order*, 95 FCC 2d 769, 828-29 (1983); 47 C.F.R. §§ 1.903(c), 22.3(b)(2), 22.703.

station are associated with the blanket authorization of that station, and thus subject to that licensee's exercise of effective operational control.[61] The Commission did not abolish airborne station licensing at that time on the grounds that such licensees are not subject to the operational control of a single carrier in the way individual land mobile units are.[62] In 1986, however, the Commission found that "the fact that no licensed common carrier exercises operating control over [airborne stations] has had little apparent effect on compliance with Commission rules."[63] The Commission noted that it had received few complaints regarding airborne stations, and that no user license had ever been revoked or subject to forfeiture.[64] In light of this record, the Commission simplified airborne station licensing by making licenses effective upon mailing of the application to the Commission and eliminating the requirement to submit a letter of intent to provide service from a local wireline carrier with the form.[65] The Commission also eliminated the assignment of individual call signs and, instead, prescribed that airborne stations identify themselves by the FAA registration number of the aircraft in which they are located.[66]

27. In the 16-year period following the Commission's simplification of airborne station licensing procedures, the Commission has received few complaints regarding such stations. We note that such equipment is used to communicate with ground facilities that are otherwise licensed by the Commission. Moreover, the requirement to file Form 409 appears to impose an unnecessary regulatory burden on end users because it involves preparation of a form as well as payment of a $50 fee for each subscriber unit. In view of the foregoing, we tentatively conclude that individual licensing of general aviation airborne mobile stations should be eliminated. We ask, however, whether there might be any other reasons for retaining this requirement or adopting a streamlined version of this requirement (*e.g.*, the need for aircraft flown to other countries to provide documentation that the airborne station is properly licensed in the United States). If we eliminate licensing of individual airborne mobile stations in the Air-Ground Radiotelephone Service, we also will eliminate FCC Form 409.[67]

28. *General eligibility*. Section 22.7 states in its first sentence: "Except as otherwise provided in this part, existing and proposed common carriers are eligible to hold authorizations in the Public Mobile Services."[68] In order to bring Part 22 licensing policies into conformance with wireless regulatory parity policies and in light of the significant competition among PMS providers, we propose to delete this limitation. As we have stated in GN Docket No. 93-252, the Commission, "[p]ursuant to Congressional mandate, . . . adopted changes to its technical, operational, and licensing rules for common

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[61] Individual Licensing Procedures, *Notice of Proposed Rulemaking*, 44 Fed. Reg. 58929 (Oct. 12, 1979).

[62] *Id.*

[63] In the Matter of Amendment of Sections of Part 22 of the Commission's Rules to Simplify Individual Licensing Procedures in the Domestic Public Air-Ground Radiotelephone Service, *Notice of Proposed Rulemaking*, 1986 Westlaw 29201113 (FEDCOM FCC library).

[64] *Id.* at ¶6.

[65] In the Matter of Amendment of Sections of Part 22 of the Commission's Rules to Simplify Individual Licensing Procedures in the Domestic Public Air-Ground Radiotelephone Service, *Report and Order*, 1 FCC Rcd 163 (1986).

[66] *See* 47 C.F.R. § 22.313(c)(2).

[67] If we eliminate Form 409, we will delete references to it in sections 1.1102 and 1.2003 of our rules, 47 C.F.R. §§ 1.1102, 1.2003.

[68] 47 C.F.R. § 22.7.

carrier and private mobile radio services that were necessary to implement the statute and to establish regulatory symmetry among similar mobile services."[69] For example, in Part 24, governing Personal Communications Services (PCS), we do not limit license holders to entities that already are or plan to become common carriers.[70] Part 27 also lacks such a limitation.[71] Rather, these Parts generally prescribe that "[a]ny entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, . . . is eligible to hold a license under this part."[72] We thus propose to eliminate the first sentence of section 22.7 and replace it with similar language defining eligibility consistent with the requirements of Section 310 regarding foreign ownership.[73] At the same time, we seek comment regarding whether elimination of the common carrier eligibility requirement in Part 22 could have any detrimental effect for Part 22 licensees. In this regard, we note that section 20.9(a)[74] explicitly finds that Part 22 Paging and Radiotelephone, Cellular Radiotelephone, Air-Ground Radiotelephone and Offshore Radiotelephone Services are CMRS, the offering of which is in turn subject to various rights and responsibilities set forth in Part 20 of the Commission's rules.[75]

29. *Definitions*. Section 22.99 defines certain terms used in Part 22.[76] The term "Radio Common Carrier" is defined as "[a] telecommunications common carrier that provides radio communications services but is not engaged in the business of providing landline local exchange telephone service."[77] The term "Wireline Common Carrier" is defined as "[a] telecommunications common carrier that is also engaged in the business of providing landline local exchange telephone service."[78] We note that these terms are no longer used in Part 22, and that the distinctions previously drawn between a radio common carrier and a wireline common carrier under these rules are obsolete.[79] We therefore tentatively conclude that these definitions should be eliminated from section 22.99.

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[69] In the Matter of Implementation of Sections 3(n) and 332 of the Communications Act – Regulatory Treatment of Mobile Services, *Memorandum Opinion and Order on Reconsideration*, 15 FCC Rcd 6341, 6341 ¶1 (2000).

[70] *See* 47 C.F.R. § 24.12.

[71] *See* 47 C.F.R. § 27.12.

[72] *See* 47 C.F.R. § 24.12.

[73] Likewise, we propose to eliminate the phrase "common carrier" from section 22.1(b), 47 C.F.R. § 22.1(b). In recent reply comments concerning our 2002 Biennial Review, the American Mobile Telecommunications Association, Inc. (AMTA) recommended that we take similar action to delete the reference to "common carrier" and instead use the term "telecommunications carrier." Reply Comments of the American Mobile Telecommunications Association, Inc., WT Dkt. No. 02-310, at 8-9 (filed Nov. 4, 2002). We think that our proposed revision to section 22.7 achieves the same goal and may provide even greater flexibility.

[74] 47 C.F.R. § 20.9(a).

[75] 47 C.F.R. Pt. 20 (Commercial Mobile Radio Services).

[76] 47 C.F.R. § 22.99.

[77] *Id.*

[78] *Id.*

[79] The distinctions previously drawn between a radio common carrier and a wireline common carrier under Part 22 date back to 1949 when nearly all common carrier mobile allocations were separated into discrete bands for radio common carriers and wireline common carriers. This separate allocation scheme was eliminated in 1984. *See* (continued....)

30. In addition, section 22.99 sets forth a number of definitions that incorporate the term "common carrier." The items using the common carrier term include "Air-Ground Radiotelephone Service," "Cellular Radiotelephone Service," "Offshore Radiotelephone Service," "Public Mobile Services," and "Rural Radiotelephone Service." In all cases, consistent with the assessment set forth in paragraph 28 above, we propose to replace the term "common carrier" in those definitions with the term "licensee." We note that we do not propose to alter the inclusion of "telecommunications common carrier" as a defined term in section 22.99.[80]

D. Licensing Requirements and Procedures

31. *Construction Prior to Grant of Application*. Section 22.143(d)(4) provides that for any pre-grant construction or alteration that would exceed the requirements of section 17.7,[81] the licensee must notify the FAA and file "a request for antenna height clearance and obstruction and marking specifications (FCC Form 854) with the FCC, PRB, Support Services Branch, Gettysburg, PA 17325."[82] We propose to make an editorial correction to the Form 854 filing location to "WTB, Database Management Division, Analysis and Development Branch, 1120 Fairfield Road, Gettysburg, PA 17325." We also propose to amend section 22.143(d)(4) to specify that Form 854 may be filed electronically by accessing the FCC's Antenna Structure Registration home page at wireless.fcc.gov/antenna/.

32. *Computation of Distance*. Section 22.157 provides the method for computing the distance between two locations, except for stations in Canada and Mexico, which must be computed under the applicable international agreement, if any.[83] Section 22.157 requires that the result of a distance calculation be rounded to the nearest whole kilometer.[84] By contrast, section 90.309(a)(1) of our rules (the distance calculation rule under Subpart L of Part 90 for Private Mobile Services authorized in the 470-512 MHz band)[85] incorporates the calculation method from section 73.611 (the Broadcast TV distance calculation rule). Section 73.611(d), in turn, incorporates the calculation method from section 73.208(c) (the FM Broadcast Station distance calculation rule), but provides that the result of that calculation shall be rounded to the nearest 0.1 kilometer. The section 73.208(c) and section 22.157 calculation methods are identical. Parts 20, 21, 24, 27, 80, 87, 95, 97 and 101, and other Subparts of Part 90 currently do not specify a distance calculation method.

33. Applying a single distance calculation method to all Wireless Radio Services should provide regulatory certainty and consistency to service providers licensed under these rule parts. We therefore tentatively conclude that section 22.157 should be recodified to Part 1, Subpart F, as new

(Continued from previous page)
In the Matter of Elimination of the Separate Frequency Allocation Structure in the Public Land Mobile Service (Rules Section 22.501); In the Matter of Revision and Update of Part 22 of the Public Mobile Radio Service Rules, *Report and Order and Order on Reconsideration*, 99 FCC 2d 311, 317 (1984).

[80] We also propose to make an editorial correction to the definitions for the terms "Communications channel," "Control channel," and "Ground station" in section 22.99 to change "Air-ground Radiotelephone Service" to "Air-Ground Radiotelephone Service." *Id.*

[81] 47 C.F.R. § 17.7 (antenna structures requiring notification to the FAA).

[82] 47 C.F.R. § 22.143(d)(4).

[83] 47 C.F.R. § 22.157.

[84] *Id.*

[85] 47 C.F.R. § 90.309(a)(1).

section 1.958, and that the reference to section 73.611 in section 90.309(a)(1) should be deleted and replaced by a reference to new section 1.958. The recodification of section 22.157 to Part 1, Subpart F, will make this distance calculation method applicable to all Wireless Radio Services described in Parts 1 (except Parts 21 and 101 as explained below), 20, 22, 24, 27, 80, 87, 90, 95, and 97,[86] and supersede any conflicting regulations in these Parts.[87] We note that software used by the Commission to process applications for Parts 21 (Domestic Public Fixed Radio Services) and 101 (Fixed Microwave Services) is programmed to round the result of a distance calculation to the nearest tenth of a kilometer. We therefore tentatively conclude that new section 1.958 should state that the result of a distance calculation under Parts 21 and 101 must be rounded to the nearest tenth of a kilometer.

34. *Computation of Terrain Elevation*. Section 22.159 sets forth the method for computation of average terrain elevation for Part 22 services.[88] Section 22.159 requires terrain elevations to be calculated as specified, except that in cases of dispute, manual methods may also be used.[89] Section 90.309(a)(4) sets forth the method for computation of average terrain elevation for Part 90 services in the 470-512 MHz band. Parts 20, 21, 24, 27, 80, 87, 95, 97, and 101 generally do not specify a terrain elevation calculation method.[90] We propose to recodify section 22.159 to Part 1, Subpart F, as new section 1.959.[91] We also propose to retain the section 90.309(a)(4) method for computation of average terrain elevation, which is unique to the licensing of the 470-512 MHz band under Part 90,[92] and cross reference it in new section 1.959. The recodification of section 22.159 to Part 1, Subpart F, will make this terrain elevation calculation method applicable to all Wireless Radio Services described in Parts 1, 20, 22, 24, 27, 80, 87, 90 (except the 470-512 MHz band), 95, 97 and 101,[93] and supersede any conflicting regulations in these Parts.[94]

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[86] *See* 47 C.F.R. § 1.901.

[87] *See* 47 C.F.R. § 1.902.

[88] 47 C.F.R. § 22.159.

[89] *Id.*

[90] Parts 20, 21, 87, 95 and 97 have no height above average terrain ("HAAT") rules. Section 24.53, 47 C.F.R. § 24.53, is generally the same as section 22.159. Part 27 defines "average terrain elevation" in section 27.4, 47 C.F.R. § 27.4, and uses HAAT in 27.50, 47 C.F.R. § 27.50, but does not specify how to calculate it. Section 80.757, 47 C.F.R. § 80.757, provides that both methods may be used. Section 80.759, 47 C.F.R. § 80.759, provides details of the manual method. Part 101 refers to "AAT" in sections 101.105 and 101.333, 47 C.F.R. §§ 101.105 and 101.333, but does not specify how it shall be calculated.

[91] RadioSoft filed comments concerning our 2002 Biennial Review urging the Commission to adopt a single standard for all services subject to HAAT analysis above 30 MHz. Comments of RadioSoft, WT Dkt. No. 02-310, at 1 (filed Oct. 18, 2002). This proposal partially responds to RadioSoft's proposal by seeking to consolidate and make uniform the procedures for HAAT calculation for wireless services to the extent possible.

[92] Distinct rules are imposed for 470-512 MHz licensing because of the unique issues raised by this band regarding land mobile and UHF TV station operation. The specific instructions relate to construction of radials in connection with coordination with co-channel and adjacent channel UHF TV stations.

[93] *See* 47 C.F.R. § 1.901.

[94] *See* 47 C.F.R. § 1.902.

35. *ASSB*. Section 22.161 sets forth application requirements for base stations in the Paging and Radiotelephone Service, Rural Radiotelephone Service, and Offshore Radiotelephone Service for which the applicant proposes to employ amplitude compandored single sideband modulation (ASSB).[95] This rule section appears to be obsolete in light of section 22.357, which permits Part 22 licensees to use any emission type that complies with applicable emission limits.[96] Under section 22.357, Part 22 licensees may change emission types without seeking prior approval.[97] We tentatively conclude that section 22.161 should be eliminated.[98]

E. Operational and Technical Requirements

36. *Channel Assignment Policy*. Section 22.351 sets forth the general policy for the assignment of PMS channels.[99] The third sentence of this section uses the term "common carrier."[100] Consistent with the approach taken above,[101] we propose to replace the term "common carrier" with the term "licensee."

37. *Interference Protection*. Section 22.352 provides, in pertinent part, that PMS licensees shall be considered non-interfering if they operate in accordance "with FCC rules that provide technical channel assignment criteria for the radio service or channels involved, all other applicable FCC rules, and the terms and conditions of their authorizations . . . ."[102] This rule helps to alleviate the administrative burden on the Commission of resolving interference complaints by creating a presumption that operations consistent with our rules and the applicable authorization are non-interfering. We tentatively conclude that this provision in the rule section can be streamlined to provide that "PMS stations operating in accordance with applicable FCC rules and the terms and conditions of their authorizations are normally considered to be non-interfering" without sacrificing any element of the Commission's intent in adopting this rule. References to technical channel assignment rules are most relevant to site-by-site licenses, and by abbreviating the explicit language, we make clear that operation consistent with Commission rules and the applicable authorization—whether on a site-by-site basis or on a geographic area basis—creates a presumption of non-interfering operation. We note that the Commission has relied in recent years on a system of voluntary cooperation and coordination between licensees, which has proven very successful in addressing interference concerns. We note that the proposed amendment would result in a rule that more accurately reflects how the Commission currently addresses interference issues.

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[95] 47 C.F.R. § 22.161.

[96] 47 C.F.R. § 22.357.

[97] *Id.*

[98] If we eliminate section 22.161, we also would eliminate the reference to this section in the definition of "Channel" in section 22.99. *See* 47 C.F.R. § 22.99.

[99] 47 C.F.R. § 22.351.

[100] This sentence provides: "Except as otherwise provided in this part, each channel or channel block is assigned exclusively to one common carrier in each service area." 47 C.F.R. § 22.351.

[101] *See* para. 28, *supra*.

[102] 47 C.F.R. § 22.352.

38. *Emission Types and Emission Masks*. An emission mask is defined as "[t]he design limits imposed, as a condition or certification, on the mean power of emissions as a function of frequency both within the authorized bandwidth and in the adjacent spectrum."[103] Section 22.357 provides that any authorized PMS station may use any type of emission provided that it complies with the appropriate emission mask. Section 22.359 is the general emission mask rule.[104] Section 22.861 is the emission limitations and mask rule for the air-ground radiotelephone service. At the time the Commission adopted the Part 22 rules, it generally used the emission mask approach to regulate in-band energy distribution. Recently, however, the Commission has been decreasing its reliance on the use of emission masks as a means to limit interference and, instead, increased its reliance on the use of out-of-band emission (OOBE) limits.[105] OOBE limits are intended to limit emissions outside of the authorized bandwidth.[106] We note that in the Cellular Biennial Review proceeding, the Commission recently amended sections 22.917 and 24.238 to specify OOBE limits for cellular and broadband PCS, respectively.[107] We seek comment on possible revision or elimination of sections 22.357, 22.359, and 22.861 in light of the trend towards use of OOBE limits. We also seek comment on whether we should adopt OOBE limits for the Part 22 services that are the subject of this proceeding.

39. *Standby Facilities*. Section 22.361 permits PMS licensees to install standby transmitters, without separate authorization, to continue service in the event of transmitter failure or during transmitter maintenance.[108] We believe that it is now universally understood in the wireless industry that licensees are not required to obtain a separate authorization to install standby transmitters. We therefore tentatively conclude that section 22.361 should be eliminated.

40. *Directional Antennas*. Section 22.363 and Table C-2 to section 22.361 set forth directional antenna technical requirements.[109] These requirements were adopted at a time when the Commission generally considered fixed wireless operations to be secondary to mobile operations. These regulations appear to be no longer necessary because, when the Commission licenses spectrum today, it provides greater flexibility to licensees to use the spectrum for mobile or fixed operations. Accordingly, we tentatively conclude that section 22.363 and Table C-2 to section 22.361 should be eliminated.

41. *Wave Polarization*. Section 22.367 sets forth polarization requirements for the electromagnetic waves radiated by PMS providers.[110] Section 22.367 specifies when vertical, horizontal,

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[103] 47 C.F.R. § 22.99.

[104] 47 C.F.R. § 22.359.

[105] *See, e.g.*, 47 C.F.R. § 27.53(a)(10) (Wireless Communications Services OOBE limits).

[106] OOBE interference results from emissions on frequencies outside a licensee's authorized band that fall within the passband of an adjacent licensee's receiver(s). A passband is the range of frequencies within which fall the desired signals (*i.e.*, the signals intended to be received by the receiver). OOBE interference cannot be mitigated through receiver filtering, and differs from the type of adjacent channel interference that results from emissions that are contained within a licensee's authorized band, but fall just outside the passband of an adjacent licensee's receiver(s).

[107] *Cellular Year 2000 Biennial Report and Order* at ¶46. An OOBE standard reflects the reduction in out-of-band energy at the transmitter.

[108] 47 C.F.R. § 22.361.

[109] 47 C.F.R. § 22.363; 47 C.F.R. § 22.361, Table C-2.

[110] 47 C.F.R. § 22.367.

or circular polarization may be used for Part 22 Services. In today's regulatory environment, where we allow fixed and mobile services to operate on a co-channel basis, the polarization restrictions may no longer be necessary or effective in reducing interference. We note that other providers of commercial mobile radio service, such as PCS and SMR providers, are not subject to a wave polarization requirement. We also note that the Commission recently eliminated the vertical wave polarization requirement for base, mobile, and auxiliary test transmitters in the Cellular Radiotelephone Service (former section 22.367(a)(4)).[111] In doing so, the Commission reasoned that allowing cellular carriers to deploy non-vertically polarized antennas would promote regulatory parity and flexibility.[112] We seek comment on eliminating section 22.367.

42. *Access to Transmitters*. Section 22.373 generally requires PMS transmitters to be accessible only to persons authorized by the licensee.[113] This rule appears unnecessary because licensees have an economic self-interest to safeguard their transmitters from unauthorized access and because unauthorized access to transmitters can be limited pursuant to state and local trespass laws. We therefore tentatively conclude that section 22.373 should be eliminated.

43. *Replacement of Equipment*. Section 22.379 permits PMS licensees to replace equipment without notifying the FCC, provided that such equipment meets certain technical requirements.[114] In the past, PMS licensees had to file an application with the Commission to deploy replacement equipment. Section 22.379, adopted in 1994,[115] was intended to advise the public that such applications were no longer required provided that certain technical requirements were met. We believe that it is now universally understood in the wireless industry that licensees are not required to file an application in order to deploy replacement equipment, provided that such equipment meets the technical requirements for the service involved. We therefore tentatively conclude that section 22.379 should be eliminated.

44. *Auxiliary Test Transmitters*. Section 22.381 limits the use of auxiliary test transmitters to testing the performance of fixed receiving equipment located remotely from the control point.[116] Section 22.381 further provides that such transmitters may only transmit on channels designated for mobile transmitters.[117] We are aware of no harm that would arise from operating auxiliary test transmitters on any authorized channel, whether base or mobile. Section 22.381 appears unnecessarily to restrict the use of test equipment, and we therefore tentatively conclude that it should be eliminated.[118]

45. *In-building Radiation Systems*. Section 22.99 defines "in-building radiation systems" as "[s]upplementary systems comprising low power transmitters, receivers, indoor antennas and/or leaky coaxial cable radiators, designed to improve service reliability inside buildings or structures located

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[111] *Cellular Year 2000 Biennial Report and Order* at ¶48.

[112] *Id.* at ¶49.

[113] 47 C.F.R. § 22.373.

[114] 47 C.F.R. § 22.379.

[115] *See* Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, *Report and Order*, 9 FCC Rcd 6513 (1994).

[116] 47 C.F.R. § 22.381.

[117] *Id.*

[118] We also seek comment on transmission power limits for auxiliary test transmitters. *See* para. 61, *infra*.

within the service areas of stations in the Public Mobile Services."[119] Section 22.383 provides that PMS licensees may install in-building radiation systems, without prior FCC approval, within their "protected service area."[120] Section 22.352(c)(7), which contains a cross reference to section 22.383, provides that no interference protection is afforded to in-building radiation systems.[121] In-building radiation systems are exempted from FAA notification under section 17.14(a)[122] and, under section 22.377, transmitters used with in-building radiation systems must be certificated for use in the radio services regulated under Part 22.[123] We believe that it is now universally understood in the wireless industry that PMS licensees may operate in-building radiation systems within their licensed geographic areas without prior FCC approval. In view of the foregoing, we tentatively conclude that section 22.383 should be eliminated and that the cross reference to this section in section 22.352(c)(7) should be eliminated.

F. Developmental Authorizations

46. *Developmental Authorizations*. Part 22, Subpart D—which includes sections 22.401, 22.403, 22.409, 22.411, 22.413, 22.415 and 22.417—governs grant of developmental authorizations in the PMS.[124] A review of Commission records indicates that these rules are seldom used and, instead, parties frequently file waiver requests that are tantamount to requests for developmental authorizations. We seek comment regarding how any of our Part 22 rules governing developmental authorizations can be improved and whether certain of these rules should be eliminated.

47. *Developmental Authorization of 43 MHz Paging Transmitters*. Sections 22.411 and 22.531(a) provide that 43 MHz channels can be initially assigned only as developmental authorizations.[125] The requirements of sections 22.411 and 22.531(a) are intended to mitigate interference with the intermediate frequency stages of receivers in television sets and video recorders. We note that, in recent years, there have been significant technical improvements in television and video recorder receivers. We seek comment on whether such technical improvements obviate the need for the requirements of sections 22.411 and 22.531(a). If the record in this proceeding demonstrates that sections 22.411 and 22.531(a) are no longer required, we intend to eliminate these rules.

48. *Developmental Authorization of 928-960 MHz Fixed Transmitters*. Section 22.415 provides that channels in the 928-931 and 952-960 MHz ranges may be assigned to fixed transmitters in point-to-multipoint systems at short-spaced locations (*i.e.*, those that do not meet the 70-mile separation requirement of section 22.625(a)).[126] Section 22.625(a) governs where transmitters may be located on the channels listed in section 22.621.[127] In the *Multiple Address Systems Order,* the Commission

[119] 47 C.F.R. § 22.99.

[120] 47 C.F.R. § 22.383.

[121] 47 C.F.R. § 22.352(c)(7).

[122] 47 C.F.R. § 17.14(a).

[123] 47 C.F.R. § 22.377.

[124] 47 C.F.R. Pt. 22, Subpt. D.

[125] 47 C.F.R. §§ 22.411, 22.531(a).

[126] 47 C.F.R. § 22.415.

[127] 47 C.F.R. §§ 22.625(a), 22.621.

amended section 22.621 to prohibit the issuance of new licenses for any 900 MHz frequencies listed in that section.[128] The Commission therefore cannot issue any developmental authorizations under section 22.415 for these channels unless it waives the licensing prohibition of section 22.621. We therefore tentatively conclude that section 22.415 should be eliminated. We also tentatively conclude that section 22.625(a) should be revised by eliminating all text following the first sentence. The text we propose to eliminate pertains to short-spaced developmental authorizations under section 22.415, and thus would no longer be necessary if we adopt our proposal to eliminate section 22.415.

49. *Developmental Authorization of Meteor Burst Systems*. Section 22.417 provides that Rural Radiotelephone Service (RRS) central office and rural subscriber stations in Alaska may use "meteor burst" propagation modes.[129] Meteor burst systems bounce radio signals off the ionized trails of evaporating space rocks to receivers up to 1,000 miles away. Meteor burst technology, however, only works in brief spurts because a typical meteor trail has an average duration of a few hundred milliseconds, while wait times between suitable trails can range from a few seconds to minutes. As such, the technology is well-suited for bursty data transmissions but not suitable for a continuous voice call. Section 22.725(c) provides that channels 42.40, 44.10, 44.20 and 45.90 MHz may be used for such purposes in Alaska.[130] Section 22.729 governs station operations using meteor burst propagation modes on these channels.[131] Commission records indicate that there are no Part 22 licensees on these channels in Alaska.[132] The 44.20 MHz channel, moreover, is only available under Part 22 on a secondary basis to operations authorized under Part 90.[133] Finally, as a practical matter and as noted above, meteor burst propagation cannot be used to transmit voice calls, which is at the core of the RRS.

50. In view of the foregoing, we ask whether sections 22.417, 22.725(c), and 22.729 should be eliminated. We note that if these sections were deleted, it would no longer be possible for entities to apply for a license to use meteor burst propagation mode in the RRS.[134] We seek comment whether we should retain these rule sections in order to maintain this licensing option for RRS licenses or whether we should delete these rule sections in light of the apparent inappropriateness of this technology for the RRS. (If these rule sections are eliminated, we intend to delete the definition of "meteor burst propagation mode" in section 22.99,[135] the section 22.313(a)(3) station identification requirements for

[128] In the Matter of Amendment of the Commission's Rules Regarding Multiple Address Systems, *Report and Order*, 15 FCC Rcd. 11,956 (2000) (*Multiple Address Systems Order*), *corrected by* Amendment of Commission's Rules Regarding Multiple Address Systems, *Erratum*,15 FCC Rcd 16415 (WTB, PSPWD 2000).

[129] 47 C.F.R. § 22.417.

[130] 47 C.F.R. § 22.725(c).

[131] 47 C.F.R. § 22.729.

[132] We note that meteor burst propagation may also be used in Alaska by licensees under Part 90 of our rules and there are operational systems under this rule part. 47 C.F.R. § 90.250.

[133] *See* 47 C.F.R. § 22.729(a).

[134] Commercially reliable transmission using meteor burst propagation requires: a frequency in the low VHF range (30-50 MHz); high transmit power; and transmission of messages in relatively short intervals.

[135] 47 C.F.R. § 22.99.

Rural Radiotelephone Service subscriber stations using meteor burst propagation,[136] and the section 22.727(f) limits on transmitter output power for meteor burst stations.[137])

G. Paging and Radiotelephone Service Rules

51. *Composite Interference Contour Over Water*. Under section 1.929(c)(1), any increase in the composite interference contour (CIC)[138] of a site-based licensee in the Paging and Radiotelephone Service, Rural Radiotelephone Service, or 800 MHz Specialized Mobile Radio Service is a major modification of license that requires prior Commission approval.[139] On March 15, 2001, the Wireless Telecommunications Bureau released a Public Notice in which it sought comment on a Request for Rule Change (Request) filed by the Personal Communications Industry Association (PCIA). In its Request, PCIA sought amendment of section 1.929(c)(1) to treat as minor modifications those expansions of paging CICs that occur solely (1) beyond the land border of the United States or (2) over large bodies of water (oceans, gulfs, sounds, bays, and the Great Lakes, but not rivers). In its Request, PCIA argued that a significant number of paging licensees have considered all extensions over water to be minor and have not filed major modification applications for such extensions. PCIA's Request was precipitated by the *Rinker* decision, which concluded that any CIC increase, including an extension over water, should be treated as a major filing under section 1.929(c)(1).[140] PCIA claimed that the *Rinker* decision has caused uncertainty about whether prior expansions over water that licensees implemented on a permissive basis are in compliance with Commission rules, and about what procedures should apply to similar future expansions. In that same Public Notice, the Bureau conditionally waived section 1.929(c)(1) to permit expansion of paging CICs over water on a secondary basis while PCIA's Request was pending.[141]

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[136] 47 C.F.R. § 22.313(a)(3).

[137] 47 C.F.R. § 22.727(f).

[138] A CIC connects the outermost points of the intersecting interference contours for the base stations in a radio system. However, an incumbent's valid CIC does not include areas surrounded by the composite interior contour that are not part of the interference contours of the incumbent's individual sites. *See* Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems and Implementation of Section 309(j) of the Communications Act - Competitive Bidding, *Memorandum Opinion and Order on Reconsideration and Third Report and Order*, 14 FCC Rcd 10030, 10055 ¶35 (1999).

[139] 47 C.F.R. § 1.929(c)(1). Section 1.947(a) states, "All major modifications, as described in section 1.929 of this part, require prior Commission approval. Applications for major modifications also shall be treated as new applications for determination of filing date, Public Notice, and petition to deny purposes." 47 C.F.R. § 1.947(a). Licensees may make minor modifications to station authorizations (as defined in Section 1.929), as a matter of right, without prior Commission approval. 47 C.F.R. § 1.947(b).

[140] *See* Karl A. Rinker, d/b/a Rinker's Communications, Request for Declaratory Ruling, 14 FCC Rcd 19546 (WTB, CWD 1999) (*Rinker*). Rinker sought a declaratory ruling as to whether contour extensions over the Atlantic Ocean are major or minor modifications. The *Rinker* decision denied Rinker's request on the grounds that it was effectively asking for a rule change and was not properly the subject of a declaratory ruling.

[141] Wireless Telecommunications Bureau Seeks Comment On Request For Rule Change And Conditionally Waives Section 1.929(C)(1) To Permit Expansion Of Paging Contours Over Water On A Secondary Basis, *Public Notice*, DA 01-688 (rel. Mar. 15, 2001). The Bureau noted that CIC expansions solely over water should pose no risk of interference to other systems on land, and that processing such applications as major modifications would be a significant burden on both licensees and the Bureau. The Bureau attached several conditions to the conditional waiver.

52. No comments were filed in response to PCIA's Request. Commission records indicate that we have not received any interference complaints arising from the conditional waiver of section 1.929(c)(1). In view of the foregoing and in light of the competitive provision of PMS, we tentatively conclude that section 1.929(c)(1) should be amended to specify that expansion of the CIC of a site-based licensee in the Paging and Radiotelephone Service—as well as the Rural Radiotelephone Service and 800 MHz Specialized Mobile Radio Service—over water, on a secondary, non-interference basis to any geographic area licensee in the same area, is not a major modification of license. We also tentatively conclude that the term "over water" should be defined as over bodies of water that extend beyond county boundaries including, but not limited to, oceans, the Gulf of Mexico, and the Great Lakes. We note that, under this proposal, any site-based licensee in these three services that seeks a CIC expansion over land must continue to obtain prior Commission approval. In addition, if a CIC expansion over water requires frequency coordination pursuant to international treaty or agreement, then such an extension would be classified as major under section 1.929(a)(5) and require prior Commission approval.[142]

53. We further propose that a site-based licensee expanding its CIC over water as defined above could do so on a permissive basis, with no notification to the Commission required. At the same time, however, we believe that the incumbent licensee in the same geographic area should have technical and engineering information regarding the site-based licensee's operations over water in order to guard against unacceptable interference to its own operations. Accordingly, we propose that the site-based licensee be required to provide to the geographic area licensee on the same frequency the technical and engineering information necessary for the latter entity to understand and evaluate the site-based licensee's operations over water. We request comment on the contents of such notification, the timing of making such a notification, whether such a requirement is necessary or excessively burdensome, and whether, instead, any filing with the Commission should be required.

54. If we were to require a Commission filing, we point out that section 22.503(f) provides that "[d]uring the term of a paging geographic area authorization, the FCC does not accept, from anyone other than the paging geographic area licensee, any major application for authorization to operate a facility that would serve unserved area within the paging geographic area specified in that paging geographic area authorization, on the channel specified in that paging geographic area authorization, unless any extension of the interfering contour of the proposed facility falls: (1) Within the composite interfering contour of another licensee; or, (2) Into unserved area and the paging geographic area licensee consents to such extension."[143] (Part 90 applicants should be aware of and seek possible waiver of similar restrictions that may be applicable to them.) If we were to require a Commission filing, site-based licensees in the Paging and Radiotelephone Service would have to request a waiver of this rule (to the extent applicable) to file such an application. Such waiver requests, however, would pose an unnecessary burden for licensees as well as FCC staff. We therefore tentatively conclude that, if we require any Commission filing regarding an expansion of CIC over water, section 22.503(f) should be revised to permit the filing of such applications. We believe that such a narrow exception to 22.503(f), if adopted, would not undermine the policy underlying this rule to protect the exclusive right of the geographic licensee to expand within the defined service area.[144]

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[142] 47 C.F.R. § 1.929(a)(5).

[143] 47 C.F.R. § 22.503(f).

[144] *See* In The Matter of Revision of Part 22 and Part 90 of the Commission's Rules to Facilitate Future Development of Paging Systems, Implementation of Section 309(j) of the Communications Act – Competitive Bidding, *Second Report and Order and Further Notice of Proposed Rulemaking,* 12 FCC Rcd 2732, 2764 ¶57 (1997).

55. Finally, we seek comment on whether extensions over water are an issue in any of our other wireless services and whether we should revise our rules to address any such circumstances.

56. *Nationwide Network Paging Channels*. Section 22.531(b) provides that frequencies 931.8875, 931.9125, and 931.9375 MHz may only be used for nationwide network paging service.[145] Section 22.551 specifies the application process for such channels in the event one should become available for licensing, and provides additional rules for nationwide network paging service.[146] We have licensed three nationwide paging providers pursuant to these rules. In light of our policy to facilitate flexible service offerings,[147] our attempts to achieve regulatory parity among competing wireless services, and the highly competitive state of the paging industry, we seek comment on whether we should amend our rules to allow licensees on these channels to provide services other than nationwide network paging. In addition, we request comment on whether the specific application processing rule for these channels remains necessary, or whether we should apply our general paging licensing rules to license these channels in the event that one of them (or a partitioned or disaggregated portion thereof) were to become available for re-licensing.

57. *Additional Channel Policies*. Section 22.539 governs the processing of applications for paging channels when an applicant has applied for or been granted another paging channel in the same geographic service area.[148] Section 22.569 governs the processing of applications for a mobile channel when the applicant has applied for or been granted other mobile channels in the same geographic area.[149] Section 22.569 applies to applications proposing to use the channels listed in section 22.561 (one-way or two-way mobile operations),[150] except applications that propose to use these channels to provide paging service only, which are subject to section 22.539. Sections 22.539 and 22.569 were adopted at a time when the Commission assigned the subject paging channels on a site-by-site basis and gave close consideration to the amount of paging spectrum held by a single entity in a particular geographic area. Today, these Part 22 paging channels are licensed on a geographic area basis rather than assigned on a site-by-site basis. Incumbents operating on a site-by-site basis may expand their systems by assignment or transfer of a license or by participating in a spectrum auction. In addition, under our current licensing scheme for paging channels, we place no blanket restrictions on the number of overlapping Part 22 paging channels that a particular entity may hold in one area. We therefore tentatively conclude that sections 22.539 and 22.569 should be eliminated.[151]

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[145] 47 C.F.R. § 22.531(b).

[146] 47 C.F.R. § 22.551.

[147] In 1996, the Commission expanded permitted offerings of fixed wireless service by Commercial Mobile Radio Service providers. *See* Amendment of the Commission's Rules to Permit Flexible Service Offerings in the Commercial Mobile Radio Services, *First Report and Order and Further Notice of Proposed Rule Making*, 11 FCC Rcd 8965 (1996), *Second Report and Order and Order on Reconsideration*, 15 FCC Rcd 14680 (2000).

[148] 47 C.F.R. § 22.539.

[149] 47 C.F.R. § 22.569. Under section 22.569, the FCC will not assign more than two channels in an area to a carrier per application cycle. That is, a carrier must apply for no more than two channels, receive the authorization, construct the station, provide service to subscribers, and notify the FCC of commencement of service to subscribers before applying for additional mobile channels in that area.

[150] 47 C.F.R. § 22.561.

[151] AMTA requests, in its 2002 Biennial Review reply comments, that the Commission clarify section 22.569 to exempt auction applicants from any restriction on the number of channels for which authorization is held. (continued....)

58. *Provision of Rural Radiotelephone Service on Paging Channels.* Rural Radiotelephone Service is a fixed radio service using wireless technology to provide telephone service to subscribers in remote areas, particularly areas where wired access is limited. Section 22.561 provides that channels in frequency ranges 152.03-152.81, 157.77-158.67, 454.025-454.650 and 459.025-459.650 MHz are allocated for paired assignment to transmitters in the Paging and Radiotelephone Service.[152] These channels also are allocated for paired assignment to transmitters that provide Rural Radiotelephone Service (RRS),[153] including both conventional RRS stations and Basic Exchange Telephone Radio Systems.[154]

59. Section 22.563 specifies that providers of two-way public mobile service in these frequency ranges—*i.e.*, Paging and Radiotelephone Service licensees—must also provide RRS upon request from a subscriber.[155] These channels, however, are now predominantly assigned for use by one-way paging systems that are technically incapable of providing RRS.[156] Because the majority of systems operating on these shared channels are technically incapable of providing RRS, they are exempt from the access requirement by the very terms of the rule section.

60. In addition, there are now a number of wireless service alternatives to RRS that are capable of providing the functionality of basic telephone service to customers in rural areas (*e.g.*, cellular, PCS, and some SMR). Indeed, FCC rules provide that cellular and PCS licensees may provide fixed services on a co-primary basis.[157] Moreover, consumers in many areas—including rural areas—have begun to substitute cellular, PCS, and some SMR service for landline service. This nascent trend is driven in part by wireless service plans that include the price of long distance service that may reduce a consumer's aggregate charges for local and toll service. In view of all of the foregoing, we tentatively conclude that the requirement contained in section 22.563 is no longer necessary and should be eliminated.[158]

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Reply Comments of the American Mobile Telecommunications Association, Inc., WT Dkt. No. 02-310 (filed Nov. 4, 2002). We think that Section 22.539(d)(3) makes clear that geographic area authorizations are not subject to the additional channel policies. We further believe that our proposal to eliminate this section in its entirety encompasses AMTA's concern. In the event that commenters suggest that we retain this rule section, however, we request comment on any modifications to the rule section that would be appropriate or necessary to resolve the issue raised by AMTA.

[152] 47 C.F.R. § 22.561.

[153] 47 C.F.R. § 22.725.

[154] 47 C.F.R. § 22.757.

[155] 47 C.F.R. § 22.563 (emphasis added). This requirement was intended to address the possibility of a lack of available channel pairs to meet future demand for rural radio telephone service. The Commission adopted this requirement when it amended the rules to allow radio common carriers (*i.e.*, non-wireline carriers) to apply for unused channel pairs that until then had been designated for assignment only to wireline common carriers. The wireline carriers had been holding some of these designated channel pairs in reserve (unused) to meet possible future rural radiotelephone service need.

[156] The equipment used to provide one-way paging service cannot be used to provide two-way RRS.

[157] *See* 47 C.F.R. § 22.901(d) (cellular fixed services); 47 C.F.R. § 24.3 (PCS fixed services).

[158] 47 C.F.R. § 22.563.

61. *Transmission Power Limits*. Section 22.565(g) limits the effective radiated power (ERP) of dispatch and auxiliary test transmitters to 100 watts.[159] We seek comment on whether the 100-watt limit should be revised or eliminated. If section 22.565(g) were eliminated, then the maximum ERP for dispatch and auxiliary test transmitters would be governed by section 22.565(a). Under section 22.565(a), fixed stations (such as dispatch and auxiliary test transmitters) operating on mobile frequencies may have a maximum ERP of 150 watts. Comments on revision or elimination of the ERP limit should take into account our seeking comment on the permissible uses of auxiliary test transmitters.[160] If we permit auxiliary test transmitters to operate on base frequencies, then the higher limits applicable to such frequencies under section 22.565(a) would apply.

62. *Dispatch Service*. Section 22.577 governs the provision of dispatch service.[161] The limitations placed on the provision of dispatch service contained in section 22.577 may be unduly restrictive in light of the Commission's flexible service offering policies[162] and given the meaningful economic competition among PMS providers. AMTA stated in its 2002 Biennial Review reply comments that the limitations in section 22.577 "no longer serve any useful technical, operational or competitive purpose and should be eliminated."[163] We therefore seek comment on whether section 22.577 should be revised or eliminated.

63. *Hawaiian UHF Channels for Point-to-Point Operation*. Section 22.591 includes a table of channels allocated to fixed transmitters that support other transmitters that provide PMS.[164] This table includes six UHF channel pairs designated for fixed use in the State of Hawaii.[165] Commission records indicate that only one of these 6 UHF channel pairs has been assigned in Hawaii under Part 22.[166] In light of the very limited usage of these channels, we seek comment on possible alternative uses of this spectrum in Hawaii. We do not propose any alternative use of this spectrum outside of Hawaii, as this band is allotted as broadcast channel 17 throughout the remainder of the United States.[167]

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[159] 47 C.F.R. § 22.565(g).

[160] *See* para. 44, *supra*.

[161] 47 C.F.R. § 22.577.

[162] *See* n.147, *supra*.

[163] Reply Comments of the American Mobile Telecommunications Association, Inc., WT Dkt. No. 02-310, at 10 (filed Nov. 4, 2002).

[164] 47 C.F.R. § 22.591.

[165] The channels are in the 488-494 MHz band, which is UHF TV channel 17. In 1982, the Commission reallocated the six channel pairs to enable Hawaiian common carriers "to transmit inter-island paging and portable telephone signals." In the Matter of Amendment of Parts 2 of the Commission's Rules Governing Frequency Allocations, 22 of the Commission's Rules Governing the Public Mobile Radio Services, 73 of the Commission's Rules Governing the Radio Broadcast Services, and 74 of the Commission's Rules Governing Experimental, Auxiliary, and Special Broadcast, and Other Program Distribution Services To Reallocate UHF-TV Broadcast Channel 17 for Common Carrier Fixed Relay and Control Operations in the State of Hawaii, *Report and Order*, 51 Rad. Reg. (P&F) 2d 398 (1982). Channel 17 was not then and is not now allotted for broadcast use in Hawaii.

[166] The 488.750, 491.750 MHz channel pair is assigned to Mobile One, Inc., Call Sign WXR957.

[167] So long as one channel pair is still used under Part 22, UHF TV channel 17 would remain unavailable in Hawaii. Moreover, 47 C.F.R. § 2.106 note NG 127 provides: "In Hawaii, the frequency band 488-494 MHz is (continued....)

64. *Channels for Point-to-Point Operation – Microwave Channels.* Section 22.591 also includes a table of 2110-2130 and 2160-2180 MHz microwave channels.[168] In 1992, the Commission allocated these bands for use by emerging technologies (ET) services and no new systems may be authorized on these channels under Part 22.[169] Recently, the Commission allocated, *inter alia*, the 2110-2130 MHz band for Advanced Wireless Services (AWS).[170] At present, both the 2110-2130 and 2160-2180 bands are widely used for common carrier fixed microwave service.[171] In light of the foregoing, we tentatively conclude that these microwave channels should be deleted from the section 22.591 table and that section 22.591(b) regarding assignment of such channels should be deleted.[172] If we eliminate the microwave channels listed in section 22.591, we intend to delete the cross-reference to section 22.591 in section 22.601 and, instead, reference the 2110-2130 and 2160-2180 MHz channels.

65. Section 22.601 specifies rules for modification of previously authorized Part 22 stations on the 2110-2130 and 2160-2180 MHz channels. Commission records indicate that 30 licensees collectively hold 57 licenses on these channels. We seek comment on the use of these licenses and whether section 22.601 should be revised at this time. For example, would it be appropriate to specify that this section sunsets one year after the Commission completes licensing of this spectrum for Advanced Wireless Services?

66. Section 22.602 sets forth rules governing a transition period for Paging and Radiotelephone Service licensees on the microwave channels listed in section 22.591 to relocate to other frequencies.[173] If we eliminate the microwave channels listed in section 22.591, we intend to delete the cross-reference to section 22.591 in section 22.602 and, instead, reference the 2110-2130 and 2160-2180 MHz channels. We also seek comment on whether section 22.602 should be revised at this time in light of the fact that Commission records indicate that 30 licensees collectively hold 53 licenses on these

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allocated exclusively to the fixed service for use by common carrier control and repeater stations for point-to-point inter-island communications only." If the entire 488-494 MHz band becomes clear, the Commission could consider reallocating this band back to broadcasting or for other purposes consistent with the Table of Allocations.

[168] The section 22.591 table incorrectly specifies eight microwave channel center frequencies. That table should reflect that there are 398 microwave channel center frequencies. *See* Revision of Part 22 of the Commission's Rules Governing the Public Mobile Services, *Report and Order*, 9 FCC Rcd 6513, 6632 (1994).

[169] In the Matter of Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies, *First Report and Order and Third Notice of Proposed Rule Making*, 7 FCC Rcd 6886, 6890 ¶21 (1992).

[170] In the Matter of Amendment of Part 2 of the Commission's Rules to Allocate Spectrum Below 3 GHz for Mobile and Fixed Services to Support the Introduction of New Advanced Wireless Services, Including Third Generation Wireless Systems, *Second Report and Order*, FCC 02-304 (rel. Nov. 15, 2002). The Commission reserved for further analysis the possible AWS use of the 2160-2165 MHz band. *Id.* at ¶7. The Commission concurrently adopted a Notice of Proposed Rulemaking on the licensing, technical, and operational rules to be applied to the newly allocated AWS bands. *See* In the Matter of Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, *Notice of Proposed Rulemaking*, FCC 02-305 (rel. Nov. 22, 2002).

[171] *See* 47 C.F.R. § 101.101.

[172] Sections 22.601 and 22.602 provide that no new systems will be authorized on these channels pursuant to Part 22. 47 C.F.R. §§ 22.601, 22.602. Section 22.602 also provides procedures for transitioning Paging and Radiotelephone Service licensees from these channels. *Id.*

[173] 47 C.F.R. § 22.602.

channels. Similarly, should we specify that this section, in addition to section 22.601, sunsets one year after completion of licensing of this spectrum for Advanced Wireless Services?

67. *Effective Radiated Power Limits*. Section 22.593 specifies power limits for the channels enumerated in section 22.591.[174] As noted above, we propose to delete the microwave channels listed in section 22.591.[175] If we eliminate these channels from section 22.591, we intend to make a conforming revision to section 22.593[176] by deleting the second sentence, which specifies the EIRP of the microwave channels listed in section 22.591.

68. *Channel Usage Reports*. Section 22.655 requires a subcategory of paging licensees – 470-512 MHz band licensees – to submit defined channel usage reports every three months. In comments filed with the Commission concerning the 2002 Biennial Review, Westel Communications, Inc. (Westel) recommends that the Commission eliminate this quarterly filing requirement.[177] As explained by the rule itself, the reporting requirement was adopted as part of the Commission's redesignation of the public mobile channels in the 470-512 MHz band from trunked mobile operation to point-to-multipoint operation as the demand for trunked mobile service decreased. Only licensees in this band providing trunked mobile service are required to submit reports, based on the premise that the reports would enable the Commission to have the information necessary to know when it may redesignate the channels to point-to-multipoint operation. Only this category of PMS licensees must file channel usage reports. Our records indicate that only two licensees remain subject to this requirement—Westel and one other licensee.

69. The Association of Public-Safety Communications Officials-International, Inc. (APCO) has questioned Westel's proposal to eliminate this reporting requirement.[178] According to APCO, "[t]hese reports are necessary to determine where spectrum in the 470-512 MHz band is underutilized, and could be made available for other uses."[179] We note, however, that the majority of CMRS licensees using the 470-512 MHz band do not have to submit these quarterly reports. We encourage the parties to work together to determine what, if any, continuing purpose these reports serve.

70. Given that only two carriers must still file these reports, and they have maintained mobile usage of the channels for some time, and because we have eliminated loading reporting requirements for other paging operators, we tentatively conclude that we should eliminate section 22.655. At the same time, we seek comment on APCO's concerns about the loss of the reports. It is possible that a quarterly reporting requirement in the current environment is no longer necessary. Alternatively, should some commenters identify a continuing value in the reports, we could consider reducing the frequency to a yearly submission. We request comment on our proposal and any alternative considerations.

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[174] 47 C.F.R. § 22.593.

[175] *See* paras. 63-64, *supra*.

[176] 47 C.F.R. § 22.593.

[177] Comments of Westel Communications, Inc., WT Dkt. No. 02-310 (filed Oct. 18, 2002).

[178] Reply Comments of APCO, WT Dkt. No. 02-310, at 3 (filed Nov. 4, 2002).

[179] *Id.*

H. Rural Radiotelephone Service Rules

71. *Channels for Basic Exchange Telephone Radio Systems.* Section 22.757 specifies channels (in addition to those listed in section 22.725) in the frequency ranges 816.0125 to 820.2375 MHz and 861.0125 to 865.2375 MHz that are allocated for paired assignment to basic exchange telephone radio systems (BETRS).[180] The Commission auctioned these channels on a geographic area basis in Auction 16 and they are no longer available for assignment to BETRS. We therefore tentatively conclude that section 22.757 should be eliminated and that the first sentence of section 22.725 should be amended to provide that the channels listed therein are available for paired assignment to BETRS.

I. Air-Ground Radiotelephone Service Rules

72. Subpart G of Part 22 sets forth regulations for general aviation (or private aircraft) air-ground service and commercial air-ground service. In this section, we address three separate requirements now applicable to general aviation air-ground service and one requirement applicable to commercial air-ground service that should be addressed regardless of the outcome of our reexamination of the provision of wireless services to members on the public on airborne commercial airplanes.

73. *Idle Tone.* Section 22.811 provides that when a ground station transmitter authorized to transmit on any Air-Ground Radiotelephone Service (AG) channel listed in section 22.805 is available for service but idle, it must continuously transmit a modulated signal on that channel with a power between 10 and 20 dB lower than the normal transmitting power.[181] All U.S. AG stations are currently required to operate using Air-Ground Radiotelephone Automated Service (AGRAS). As a result, the idle tone rule, which was intended to facilitate manual AG service, appears to have become obsolete. We tentatively conclude that section 22.805 should be eliminated.

74. *Construction Period for General Aviation Ground Stations.* Section 22.815 provides that "[t]he construction period (see § 22.142) for general aviation ground stations is 12 months."[182] Former section 22.142[183] was consolidated into current section 1.946[184] as part of the implementation of the Universal Licensing System rules.[185] Former section 22.142 and current section 1.946 provide that if a licensee fails to commence service by the expiration of its construction period, its license terminates automatically, without specific Commission action. We therefore tentatively conclude that the reference to former section 22.142 in section 22.815 should be eliminated and replaced with a reference to section 1.946.

75. *AGRAS.* Section 22.819 provides that, after January 1, 1996, stations transmitting on the general aviation air-ground service channels must operate in compliance with the requirements set forth

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[180] 47 C.F.R. § 22.757.

[181] 47 C.F.R. § 22.811.

[182] 47 C.F.R. § 22.815.

[183] 47 C.F.R. § 22.142 (1997).

[184] 47 C.F.R. § 1.946.

[185] *See* Biennial Regulatory Review—Amendment of Parts 0, 1, 13, 22, 24, 26, 27, 80, 90, 95, 97 and 101 of the Commission's Rules to Facilitate the Development and Use of the Universal Licensing System in the Wireless Telecommunications Services, *Report and Order*, 13 FCC Rcd 21027 (1998) (*ULS Report and Order*); *Memorandum Opinion and Order on Reconsideration*, 14 FCC Rcd 11145 (1998).

in the document, "Technical Reference, Air-ground Radiotelephone Automated Service (AGRAS), System Operation and Equipment Characteristics," dated April 12, 1985.[186] We understand that the industry is currently developing a new operating technology that may be superior to AGRAS. We wish to facilitate such technical innovation and request comment on the best means for doing so. Should the Commission eliminate section 22.819 at this time or after the new standard is ready for implementation? What, if anything, should the Commission do to facilitate technical compatibility and interoperability using this, or any other, new technology developed to provide this service?

76. *Control Channel Transition Period*. Section 22.871 provides that the experimental air-ground system operating on the channels listed in section 22.857 may use a 3.2 kHz control channel on channel C-2 of each channel block until September 9, 1996.[187] This date has long passed, so the rule appears unnecessary. We tentatively conclude that section 22.871 should be eliminated.

J. Offshore Radiotelephone Service Rules

77. Subpart I of Part 22—which includes sections 22.1001, 22.1003, 22.1005, 22.1007, 22.1009, 22.1011, 22.1013, 22.1015, 22.1025, 22.1031, 22.1035, and 22.1037—governs the licensing and operation of Offshore Radiotelephone Service (ORS) stations. These stations provide telephone service to subscribers located on oil exploration and productions platforms in the Gulf of Mexico. To date, we have received no requests for revising the rules governing ORS to provide increased flexibility. In this Notice, we specifically request comment whether any of the Subpart I rules warrant review at this time as a result of meaningful economic competition among providers of wireless services, or on any other basis. In any event, we propose to revise section 22.1003,[188] to revise the eligibility requirements to eliminate references to "common carriers" and instead to rely on language similar to that used in Parts 24 and 27 ("[a]ny entity, other than those precluded by section 310 of the Communications Act of 1934, as amended, 47 U.S.C. 310, . . . is eligible to hold a license under this part"). This proposal is consistent with similar proposals contained in this Notice.[189]

III. PROCEDURAL MATTERS

A. Form of Comments

78. In order to facilitate staff review of the record in this proceeding, parties that submit comments or reply comments in this proceeding are requested to provide a table of contents with their comments. Such a table of contents should, where applicable, parallel the table of contents of this *Notice*.

B. Comment Filing Procedures

79. *Comments and Reply Comments*. Pursuant to applicable procedures set forth in sections 1.415 and 1.419 of the Commission's rules,[190] interested parties may file comments on this notice of proposed rulemaking in WT Docket No. 03-103 on or before 60 days after the date of publication of a

[186] 47 C.F.R. § 22.819.

[187] 47 C.F.R. § 22.871.

[188] 47 C.F.R. § 22.1003.

[189] *See, e.g.*, para. 28, *supra*.

[190] 47 C.F.R. §§ 1.415, 1.419.

summary of this Notice in the Federal Register, and reply comments on or before 90 days after the date of publication of a summary of this Notice in the Federal Register. Comments may be filed using the Commission's Electronic Comment Filing System (ECFS) or by filing paper copies.[191] Given recent changes in the Commission's mail delivery system, parties are strongly urged to use the ECFS to file their pleadings. Comments filed through the ECFS can be sent as an electronic file via the Internet to <http://www.fcc.gov/e-file/ecfs.html>. Only one copy of an electronic submission must be filed. In completing the transmittal screen, electronic filers should include their full name, Postal Service mailing address, and the applicable docket or rulemaking number. Parties may also submit an electronic comment by Internet e-mail. To receive filing instructions for e-mail comments, commenters should send an e-mail to ecfs@fcc.gov, and should include the following words in the body of the message, "get form <your e-mail address>." A sample form and directions will be sent in reply.

80. Parties who choose to file by paper must file an original and four copies of each filing in WT Docket No. 03-103. If parties want each Commissioner to receive a personal copy of their comments, an original plus nine copies must be filed. All filings by mail (including U.S. Postal Service Express Mail, Priority Mail and First Class Mail) must be sent to the Commission's Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 445 12th Street, S.W., Washington D.C. 20054. All filings sent to the Commission by overnight delivery (*e.g.*, Federal Express, except by U.S. Postal Service) must be sent to the Commission's Secretary, Marlene H. Dortch, Federal Communications Commission, Office of the Secretary, 9300 East Hampton Drive, Capitol Heights, MD 20743. All hand-delivered or messenger-delivered filings must be delivered to the Commission's filing location at 236 Massachusetts Avenue, N.E., Suite 110, Washington, D.C. 20002-4913.[192] The filing hours at this facility are 8:00 a.m. to 7:00 p.m. Parties must also serve the following with either one copy of each filing via e-mail or two paper copies: (1) Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or e-mail at qualexint@aol.com; and (2) Richard Arsenault, Wireless Telecommunications Bureau, 445 12th Street, S.W., Washington, D.C., 20554, rarsenau@fcc.gov.

81. Parties who choose to file by paper should also submit their comments on diskette to: Richard Arsenault, Attorney Advisor, Commercial Wireless Division, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C. 20554. The required diskette copies of submissions should be on 3.5-inch diskettes formatted in an IBM compatible format using Word or compatible software. Each diskette should be accompanied by a cover letter and should be submitted in "read only" mode. The diskette should be clearly labeled with the commenter's name, proceeding (WT Docket No. 03-103), type of pleading (comment or reply comment), date of submission, and the name of the electronic file on the diskette. The label should also include the following phrase "Disk Copy - Not an Original." Each diskette should contain only one party's pleadings, preferably in a single electronic file.

82. *Availability of Documents*. Comments, reply comments, and ex parte submissions will be available for public inspection during regular business hours in the FCC Reference Center, Federal Communications Commission, 445 12th Street, S.W., Room CY-A257, Washington, D.C. 20554. Persons with disabilities who need assistance in the FCC Reference Center may contact Bill Cline at (202) 418-0267, (202) 418-7365 TTY, or bcline@fcc.gov. These documents also will be available electronically at the Commission's Disabilities Issues Task Force web site, www.fcc.gov/dtf, and from

[191] Electronic Filing of Documents in Rulemaking Proceedings, 63 Fed. Reg. 24121(1998).

[192] *See* FCC Announces a New Filing Location for Paper Documents and a New Fax Number for General Correspondence, *Public Notice*, DA 01-2919 (rel. Dec. 14, 2001).

the Commission's Electronic Comment Filing System. Documents are available electronically in ASCII text, Word 97, and Adobe Acrobat. Copies of filings in this proceeding may be obtained from Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or via e-mail at qualexint@aol.com. This document is also available in alternative formats (computer diskette, large print, audio cassette, and Braille). Persons who need documents in such formats may contact Brian Millin at (202) 418-7426, TTY (202) 418-7365, or send an e-mail to access@fcc.gov.

C. Ex Parte Presentations

83. This is a permit-but-disclose rulemaking proceeding, subject to the "permit-but-disclose" requirements under section 1.1206(b) of the Commission's rules.[193] Ex parte presentations are permissible if disclosed in accordance with Commission rules, except during the Sunshine Agenda period when presentations, ex parte or otherwise, are generally prohibited. Persons making oral ex parte presentations are reminded that a memorandum summarizing a presentation must contain a summary of the substance and not merely a listing of the subjects discussed. More than a one or two sentence description of the views and arguments presented is generally required.[194] Additional rules pertaining to oral and written presentations are set forth in section 1.1206(b) of the Commission's rules. Parties submitting written ex parte presentations or summaries of oral ex parte presentations are urged to use the ECFS in accordance with the Commission rules discussed above. Parties filing paper ex parte submissions must file an original and one copy of each submission with the Commission's Secretary, Marlene H. Dortch, at the appropriate address as shown above for filings sent by either U.S. mail, overnight delivery, or hand or messenger delivery. Parties must also serve the following with either one copy of each ex parte filing via e-mail or two paper copies: (1) Qualex International, Portals II, 445 12th Street, S.W., Room CY-B402, Washington, D.C., 20554, telephone (202) 863-2893, facsimile (202) 863-2898, or e-mail at qualexint@aol.com; and (2) Richard Arsenault, Wireless Telecommunications Bureau, Federal Communications Commission, 445 12th Street, S.W., Washington, D.C., 20554, rarsenau@fcc.gov.

D. Regulatory Flexibility Act

84. As required by the Regulatory Flexibility Act,[195] the Commission has prepared an Initial Regulatory Flexibility Analysis (IRFA) of the possible impact on small entities of the proposals in this Notice of Proposed Rulemaking. The IRFA is set forth in Appendix A. Written public comments are requested on the IRFA. These comments must be filed in accordance with the same filing deadlines for comments on the NPRM, and they must have a separate and distinct heading designating them as responses to the IRFA. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this NPRM, including the IRFA, to the Chief Counsel for Advocacy of the Small Business Administration, in accordance with the Regulatory Flexibility Act.[196]

[193] 47 C.F.R. § 1.1206.

[194] 47 C.F.R. § 1.1206(b)(2).

[195] 5 U.S.C. § 603.

[196] 5 U.S.C. § 603(a).

E. Initial Paperwork Reduction Act of 1995 Analysis

85. This NPRM contains either a proposed or modified information collection. As part of its continuing effort to reduce paperwork burdens, we invite the general public and the Office of Management and Budget (OMB) to take this opportunity to comment on the information collections contained in this NPRM, as required by the Paperwork Reduction Act of 1995, Public Law 104-13. Public, agency, and OMB comments are due at the same time as other comments on this NPRM (which are due 60 days from the date of publication of this NPRM in the Federal Register). Comments should address: (a) whether the proposed collection of information is necessary for the proper performance of the functions of the Commission, including whether the information shall have practical utility; (b) the accuracy of the Commission's burden estimates; (c) ways to enhance the quality, utility, and clarity of the information collection; and (d) ways to minimize the burden of the collection of information on the respondents, including the use of automated collection techniques or other forms of technology.

86. Written comments by the public on the proposed and/or modified information collections are due 60 days after the date of publication of a summary of this Notice in the Federal Register. Written comments must be submitted by the Office of Management and Budget (OMB) on the proposed and/or modified information collections on or before 60 days after the date of publication of a summary of this Notice in the Federal Register. In addition to filing comments with the Secretary, a copy of any comments on the information(s) contained herein should be submitted to Judy Boley, Federal Communications Commission, Room 1-C804, 445 12th Street, S.W., Washington, DC 20554, or via the Internet to jboley@fcc.gov, and to Kim Johnson, OMB Desk Officer, 10236 NEOB, 725 17th Street, N.W., Washington, DC 20503, or via the Internet to Kim_A._Johnson@omb.eop.gov.

F. Contact Information

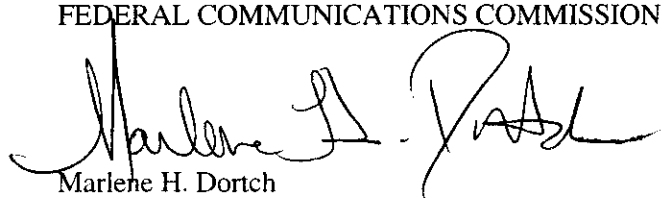
87. The Wireless Telecommunications Bureau contact for this proceeding is Richard Arsenault at (202) 418-0920, rarsenau@fcc.gov. Press inquiries should be directed to Meribeth McCarrick, Wireless Telecommunications Bureau, at (202) 418-0654, TTY at (202) 418- 7233, or e-mail at mmccarri@fcc.gov.

IV. ORDERING CLAUSES

88. Accordingly, IT IS ORDERED that, pursuant to the authority contained in sections 1, 4(i), 11, and 303(r) of the Communications Act of 1934, as amended, 47 U.S.C. §§ 151, 154(i), 161, and 303(r), this NOTICE OF PROPOSED RULEMAKING is hereby ADOPTED.

89. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this NOTICE OF PROPOSED RULEMAKING, including the Initial Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION



Marlene H. Dortch
Secretary

APPENDIX A

INITIAL REGULATORY FLEXIBILITY ANALYSIS

As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[197] the Commission has prepared this present Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities of the policies and rules proposed in this Notice of Proposed Rulemaking ("Notice"), WT Docket No. 03-103. Written public comments are requested on this IRFA. Comments must be identified as responses to the IRFA and must be filed by the deadlines for comments on the Notice, provided in paragraph 79 of the Notice. The Commission will send a copy of the Notice, including this IRFA, to the Chief Counsel for Advocacy of the Small Business Administration (SBA).[198] In addition, the Notice and IRFA (or summaries thereof) will be published in the Federal Register.[199]

A. Need for, and Objectives of, the Proposed Rules

In the Notice, we undertake a fundamental reexamination of our rules governing the provision of air-ground telecommunications services on commercial airplanes (*i.e.*, those rules affecting the availability of wireless services to passengers on commercial aircraft) in order to enhance the options available to the public.[200] Our goal is to promote service provision that better meets the needs of the public for wireless air-ground communications services. At present, only one of the six available licenses in this service is used to serve the public. In the Notice, we seek comment on whether any changes to our rules could provide greater opportunities for the competitive provision of these services, leading to lower prices to consumers and increased choices in wireless services and enhancements while traveling by commercial airliner.[201] To this end, we are open to all possible suggestions for fundamental reform. In addition, in this context, we seek comment regarding whether the commercial air-ground spectrum is being efficiently used, since there is now only one operating licensee in a regulatory plan that originally contemplated six competing service providers. We also seek comment on possible amendment of rules for other wireless services to permit the provision of commercial air-ground service by licensees of such spectrum.[202]

We initiate this proceeding partly in furtherance of our biennial review of regulations pursuant to Section 11 of the Communications Act of 1934, as amended.[203] Section 11 requires us to review our regulations applicable to providers of telecommunications service and to "determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition

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[197] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[198] *See* 5 U.S.C. § 603(a).

[199] *Id.*

[200] *Notice* at paras. 7-22, *supra.*

[201] *Id.* at para. 17, supra.

[202] *Id.* at para. 22, *supra.*

[203] 47 U.S.C. § 161.